

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: LARRY'S POND	Lake Area (ha):	4.86
Town: RICHMOND	Maximum depth (m):	4.9
County: Cheshire	Mean depth (m):	1.4
River Basin: Connecticut	Volume (m ³):	64000
Latitude: 42°46'00" N	Relative depth:	2.0
Longitude: 72°13'12" W	Shore configuration:	1.62
Elevation (ft): 1148	Areal water load (m/yr):	20.80
Shore length (m): 1250	Flushing rate (yr ⁻¹):	15.40
Watershed area (ha): 184.8	P retention coeff.:	0.47
% watershed ponded: 0.0	Lake type:	natural w/dam

<u>BIOLOGICAL:</u>		13 February 2003	8 August 2002
DOM. PHYTOPLANKTON (% TOTAL)	#1	PERIDINIUM 35%	MALLOMONAS 45%
	#2		MERISMOPEDIA 40%
	#3	(ALL ALGAE SPARSE)	PERIDINIUM 12%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			7.03
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 72%	KELICOTTIA 62%
	#2		NAUPLIUS LARVA 22%
	#3		POLYARTHRA 9%
ROTIFERS/LITER		38	151
MICROCRUSTACEA/LITER		<1	54
ZOOPLANKTON ABUNDANCE (#/L)		47	204
VASCULAR PLANT ABUNDANCE			Common
SECCHI DISK TRANSPARENCY (m)			2.2
BOTTOM DISSOLVED OXYGEN (mg/L)		2.6	0.3
BACTERIA (E. coli, #/100 ml)	#1		< 1
	#2		< 1
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 3.5
Hypolimnion volume (m³): None
Anoxic volume (m³): 1500

CHEMICAL:

Lake: LARRY'S POND

Town: RICHMOND

	13 February 2003		8 August 2002		
DEPTH (m)	1.5	3.0	1.5		3.0
pH (units)	5.1	5.0	5.5		5.3
A.N.C. (Alkalinity)	0.4	0.4	0.9		-0.1
NITRATE NITROGEN	0.10	0.09	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	< 0.25	0.30	0.50		0.50
TOTAL PHOSPHORUS	0.012	0.017	0.023		0.022
CONDUCTIVITY (μ mhos/cm)	40.2	39.2	29.5		30.0
APPARENT COLOR (cpu)	33	44	70		70
MAGNESIUM			0.43		
CALCIUM			1.1		
SODIUM			3.3		
POTASSIUM			0.65		
CHLORIDE	5	5	4		4
SULFATE	6	5	3		3
TN : TP		23	22		23
CALCITE SATURATION INDEX			5.8		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 2002

D.O. S.D. PLANT CHL TOTAL CLASS

**	3	3	1	7	Meso.
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COMMENTS:

1. No public access. The pond is surrounded by privately-owned lands under Morgan Reserve Homeowners Association control. Signs indicated private road, private pond and private beach. Canoe access only with permission of the association.
2. This is a tea-colored acidic pond with essentially no ANC (buffering capacity). Phosphorus levels were somewhat elevated but plankton production was not high.

Larry's Pond

Richmond

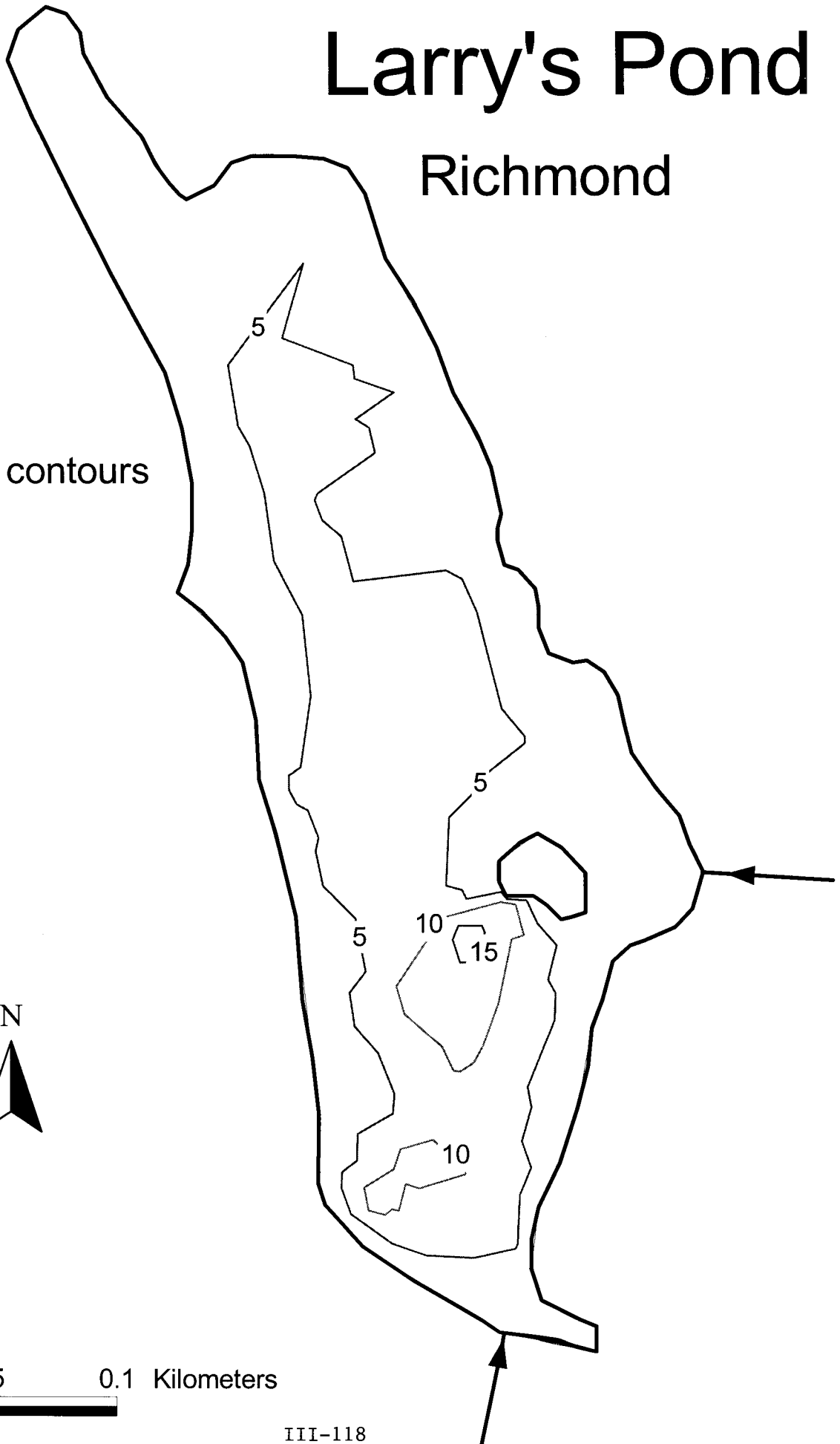
5 foot depth contours



0 0.05 0.1 Kilometers



III-118



FIELD DATA SHEET

LAKE: LARRY'S POND	TOWN: RICHMOND
DATE: 08/08/2002	WEATHER: Clear, warm & breezy

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[illegible]

SECCHI DISK (m):	2.2	COMMENTS:	
BOTTOM DEPTH (m):	4.9		Essentially no D.O. below 3 meters.
TIME:	1200		
*Dissolved oxygen values are in mg/L			

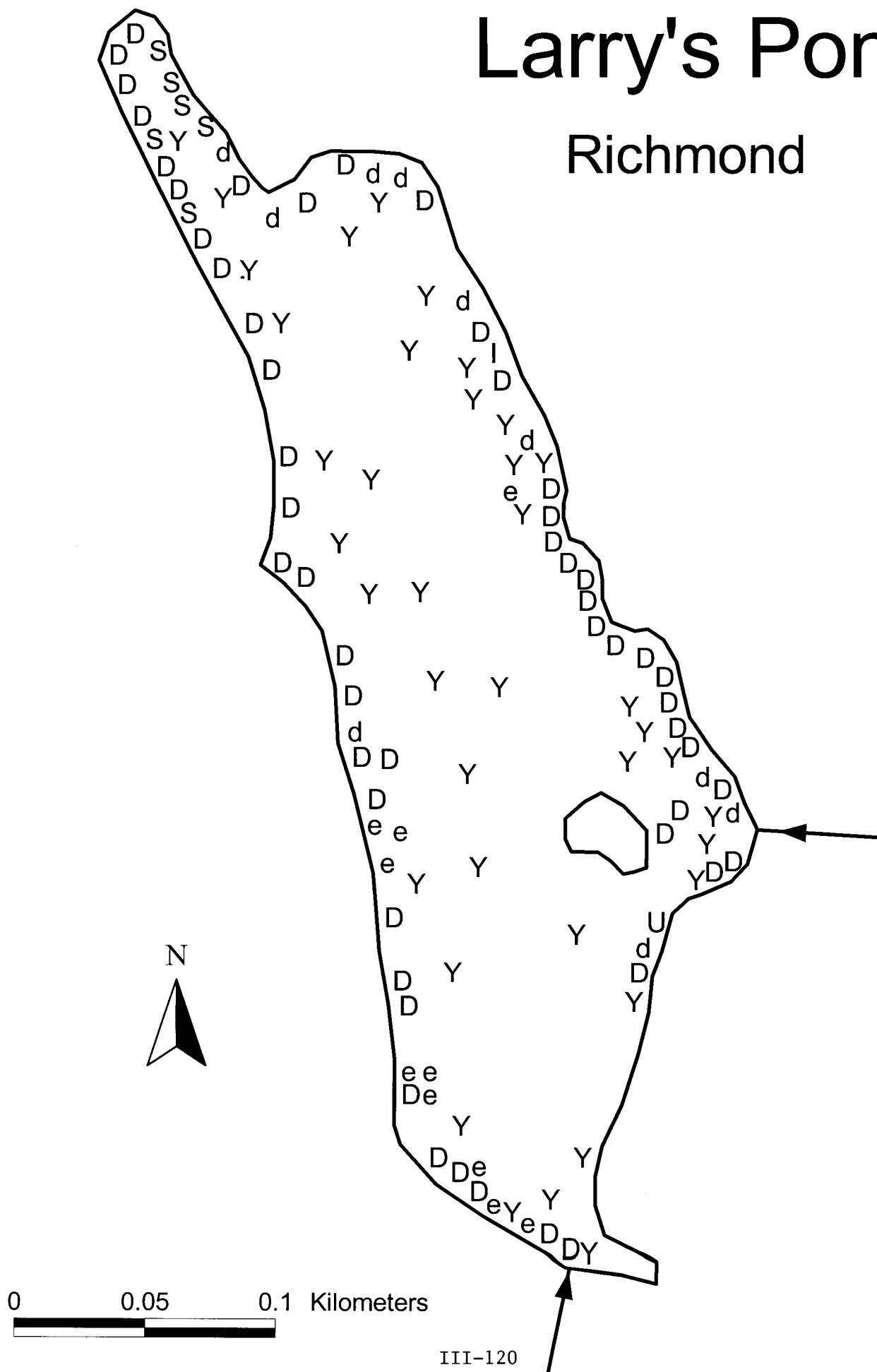
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Larry's Pond

Richmond



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